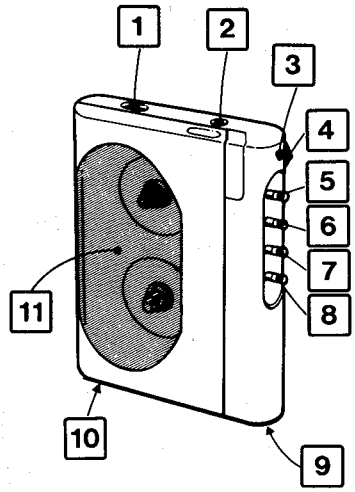
WM-50/70

SERVICE MANUAL

AR19

WM-50:
AEP Model
UK Model
E Model
WM-70:
US Model
Canadian Model



1 TAPE selector
2 ∩ (headphones) jack
3 BATT (battery) indicator
4 VOL (volume) control
5 ◀ PLAY (playback) button
6 ■ STOP button
7 ◀◀ (fast forward) button
8 ▶▶ (rewind) button
9 Battery compartment lid (bottom)
10 DC IN 1.5 V (external power input) jack (bottom)
11 Cassette holder

REVISED

Discard WM-50/70 SERVICE MANUAL (No. 9-951-989-11) previously issued.

SPECIFICATIONS

Tape track: 4-track 2-channel stereo
Fast winding time: Approx. 3 min. 30 sec. with Sony cassette HF-60
Frequency response:
40–15,000 Hz (with the TAPE selector set to CrO_2/METAL)
40–15,000 Hz (with the TAPE selector set to NORMAL)
Power output: 5 mW + 5 mW (max.)
5 mW + 5 mW (at 10% harmonic distortion) at dc operation
Power requirements: 1.5 V dc
Size AA (IEC designation R6) battery
Sony EBP-10 battery case (optional) for use on two size AA (IEC designation R6) batteries
DC IN 1.5 V jack accepts:
Sony AC-D1 ac power adaptor (optional) for use on 120 V ac, 60 Hz
Sony DCC-70 car battery cord (optional) for use with 12 V car battery

Battery life (continuous playback hours):
Approx. 2.5 hours with Sony SUM-3(NS) New Super battery
Approx. 5 hours with supplied Sony Eveready AM3 alkaline battery
For maximum performance we recommend the use of alkaline battery.
Dimensions:
Approx. 87 × 112 × 23 mm ($3\frac{1}{2} \times 4\frac{1}{2} \times \frac{29}{32}$ inches) (w/h/d)
not incl. projecting parts and controls
Approx. 87.1 × 113 × 24.9 mm ($3\frac{1}{2} \times 4\frac{1}{2} \times 1$ inches) (w/h/d)
incl. projecting parts and controls
Weight: Approx. 200 g (7.1 oz) incl. battery, not incl. other accessories

See page 12 for the table of cabinet color variation.

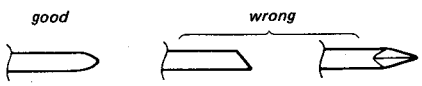
Tape Transport Mechanism Type	MT-WM50-25

SERVICING NOTE

Flexible Circuit Board Repairing

1. Keep the temperature of the soldering iron at 270° ± 10°C during repairing.
2. Do not touch the soldering iron more than 4 seconds or 3 times on the same conductor of the circuit board.
3. Do not apply force on the conductor when soldering or unsoldering.

Tip of soldering iron



MICROFILM

CASSETTE PLAYER

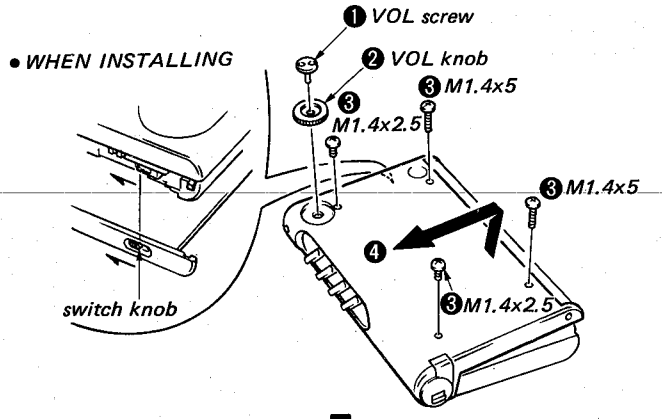
SONY®

TC

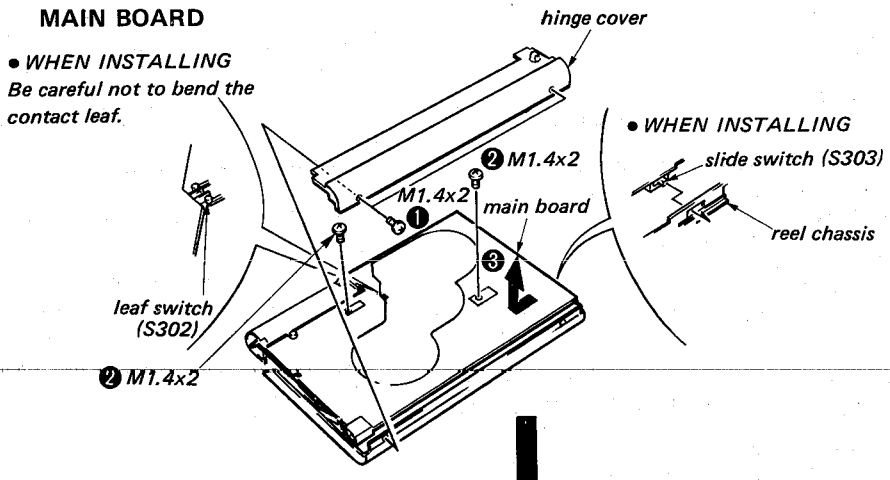
SECTION 1
DISASSEMBLY

NOTE: Follow the disassembly procedure in the numerical order given.

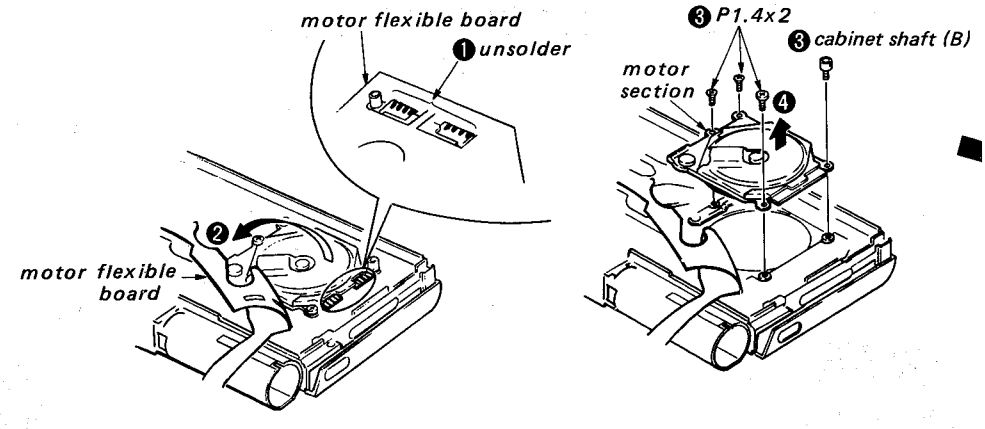
CABINET



MAIN BOARD

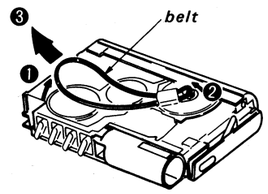


MOTOR SECTION

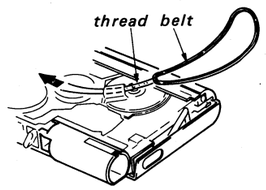


BELT

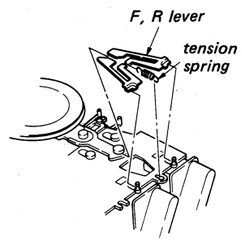
• *WHEN REMOVING*



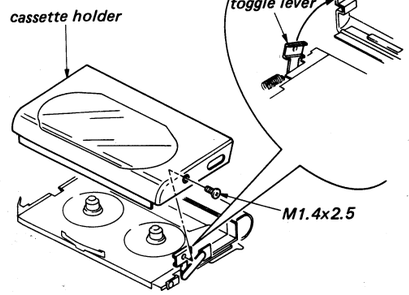
• *WHEN INSTALLING*



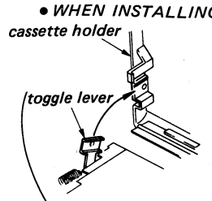
F, R LEVER (C)



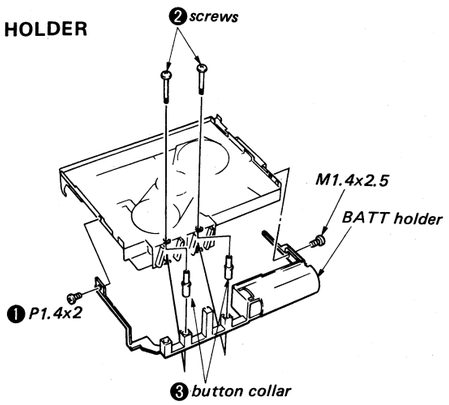
CASSETTE HOLDER



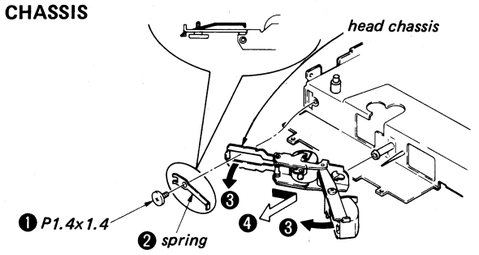
• *WHEN INSTALLING*



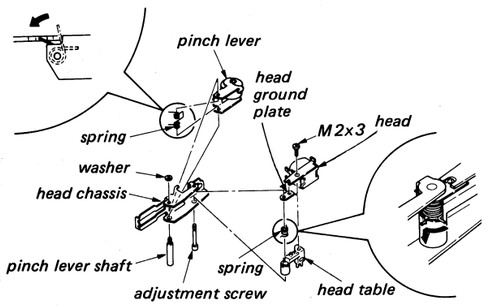
BATT HOLDER



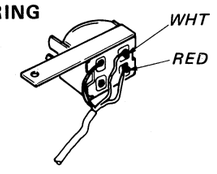
HEAD CHASSIS



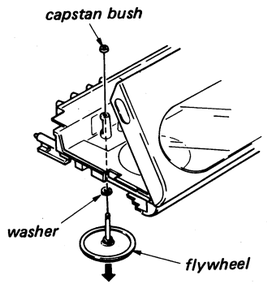
• *ASSEMBLING*



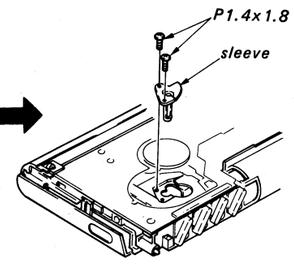
HEAD WIRING



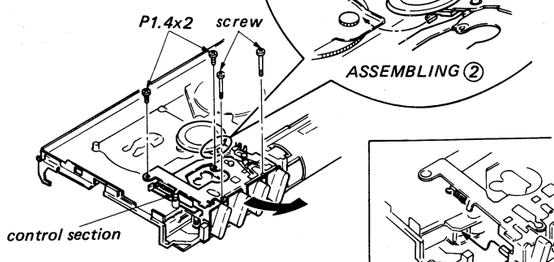
FLY WHEEL



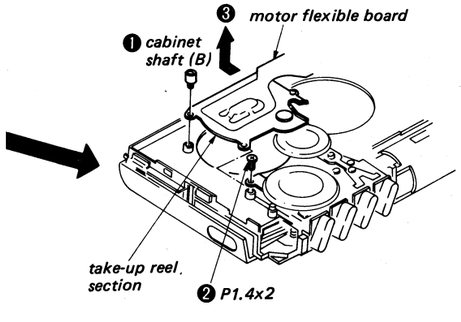
SLEEVE

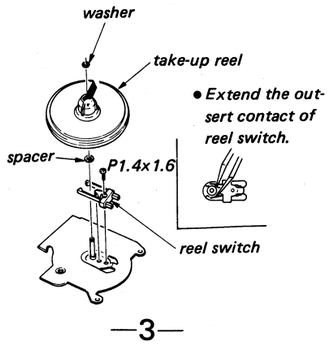


CONTROL SECTION

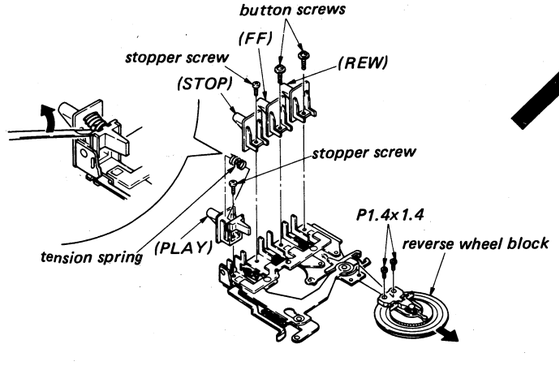


TAKE-UP REEL



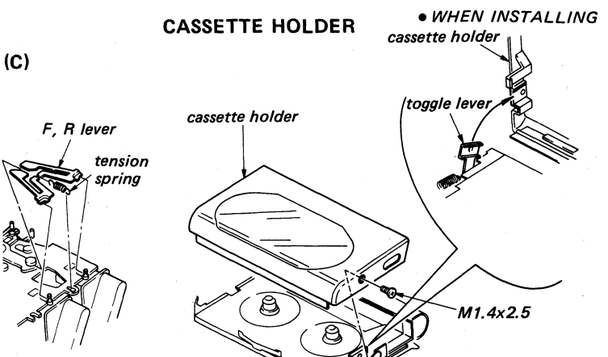


CONTROL BUTTON (PLAY, STOP, FF, REW), REVERSE WHEEL BLOCK



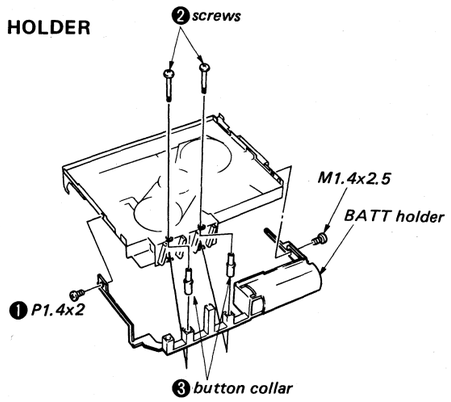
Torque Measurement

	Torque meter	Meter reading
FWD	CQ-102C	20 – 40 g·cm (0.28 – 0.56 oz·inch)
FF, REW	CQ-201B	More than 60 g·cm (More than 0.83 oz·inch)
Back Tension	CQ-102C	0 – 2.5 g·cm () – 0.03 oz·inch)
Tape Pulling Force	CQ-403	More than 45 g·cm (More than 0.62 oz·inch)

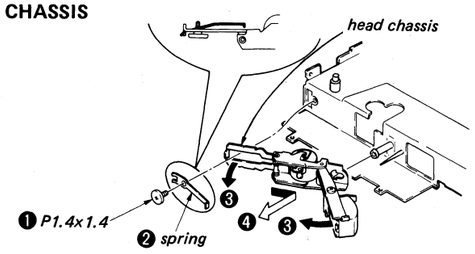


CASSETTE HOLDER

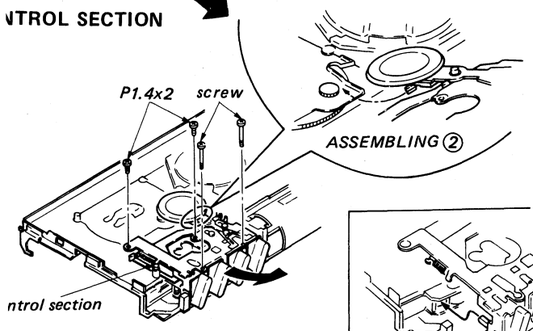
BATT HOLDER

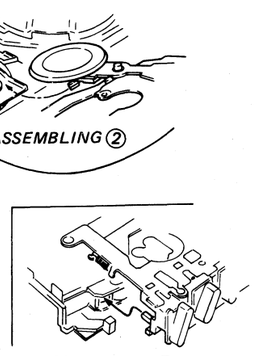


HEAD CHASSIS

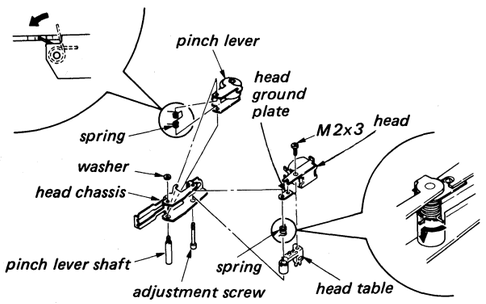


NTROL SECTION

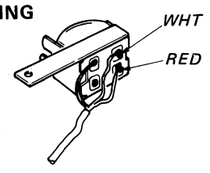




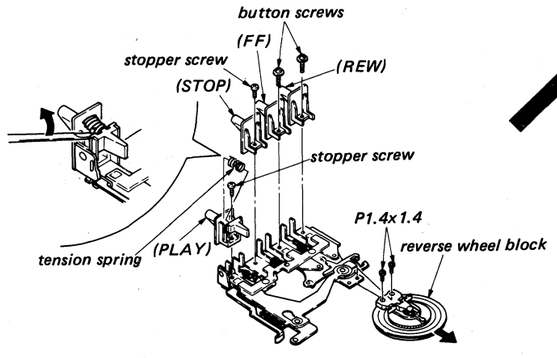
• ASSEMBLING



HEAD WIRING



ROL BUTTON (PLAY, STOP, FF, REW), REVERSE WHEEL BLOCK



Torque Measurement

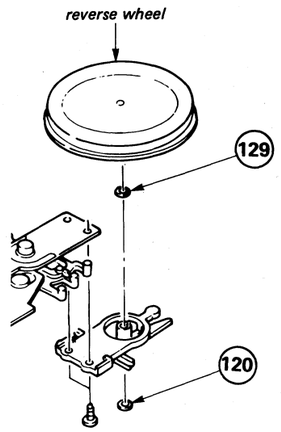
	Torque meter	Meter reading
FWD	CQ-102C	20 – 40 g·cm (0.28 – 0.56 oz·inch)
FF, REW	CQ-201B	More than 60 g·cm (More than 0.83 oz·inch)
Back Tension	CQ-102C	0 – 2.5 g·cm () – 0.03 oz·inch)
Tape Pulling Force	CQ-403	More than 45 g·cm (More than 0.62 oz·inch)

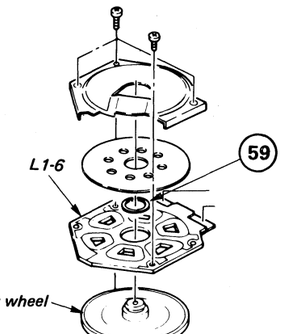
SECTION 2 ADJUSTMENTS

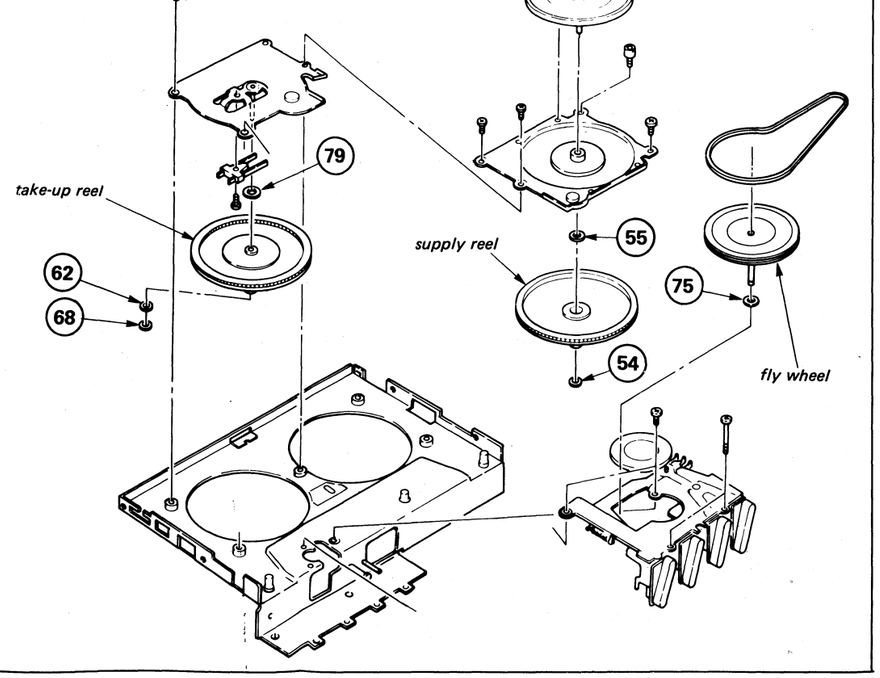
2-1. MECHANICAL ADJUSTMENT

Thrust Clearance Adjustment

	Thrast Clearance	Adjust-ment part	Part No.
Motor wheel	0.2mm	59	3-315-332-01 (t=0.05) 3-315-332-11 (t=0.1) 3-315-332-21 (t=0.13)
Supply reel	0.05—0.15mm	54	3-315-384-01 (t=0.13) 3-315-384-11 (t=0.25) 3-315-384-21 (t=0.2) 3-315-384-31 (t=0.3) 3-315-384-41 (t=0.35)
		55	3-317-702-01 (t=0.2) 3-317-702-11 (t=0.05) 3-317-702-21 (t=0.1)
Take-up reel	0.05—0.15mm	62	3-317-701-01 (t=0.45) 3-317-701-11 (t=0.25)
		68	3-315-384-01 (t=0.13) 3-315-384-11 (t=0.25)
		79	3-701-438-01 (t=0.13) 3-701-438-11 (t=0.25)
Reverse wheel	0.05—0.15mm	120	3-315-414-00 (t=0.25) 3-315-414-11 (t=0.19) 3-315-414-21 (t=0.13)
		129	3-315-415-00 (t=0.08) 3-315-415-11 (t=0.1) 3-315-416-00 (t=0.1) 3-315-416-11 (t=0.2)
Flywheel	0.05—0.15mm	75	3-315-495-01 (t=0.25) 3-315-495-11 (t=0.13) 3-315-495-21 (t=0.2) 3-315-495-31 (t=0.3)





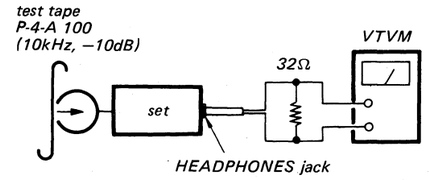


2-2. ELECTRICAL ADJUSTMENTS

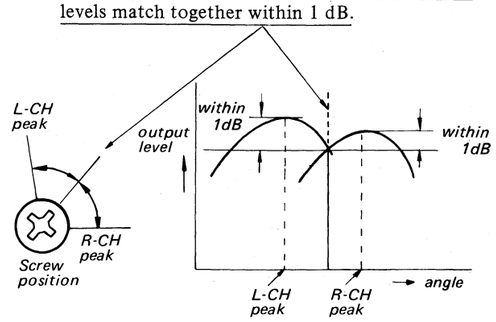
Playback Head Azimuth Adjustment

Procedure:

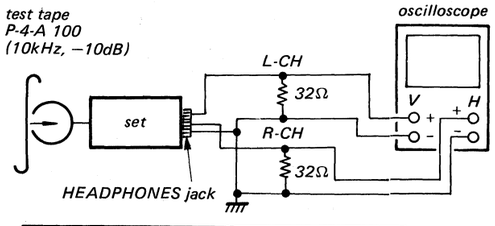
1. Mode: playback

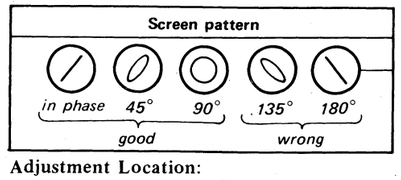


2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw where both of output levels match together within 1 dB.

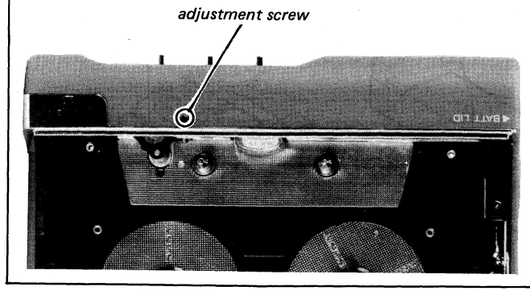


3. Phase Check
   Confirm that phase difference between L-channel and R-channel is within 90°.





Adjustment Location:

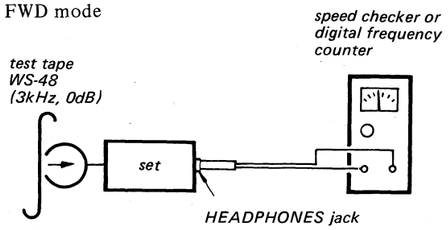


Tape Speed Adjustment

Setting:
VOLUME Knob: Mechanical center

Procedure:

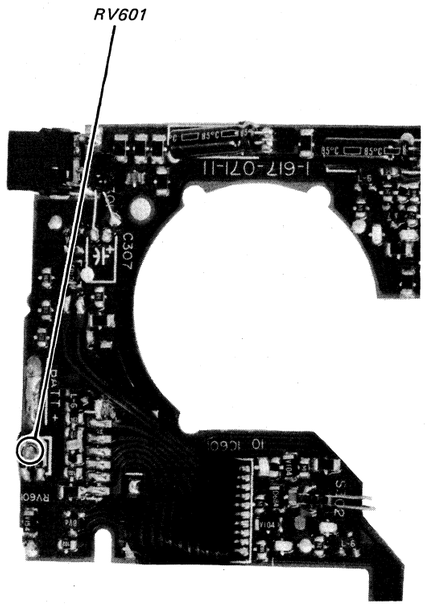
- FWD mode



Specification:

Speed checker	Digital frequency counter
± 2 %	2,940 ~ 3,060 Hz

Adjustment Location:

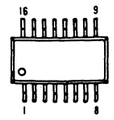


SECTION 3
DIAGRAMS

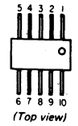
3-1. MOUNTING DIAGRAM

- **Semiconductor Lead Layouts**

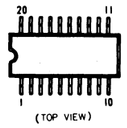
BA3413F



CX20089A

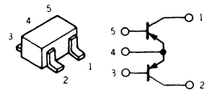


CX20123

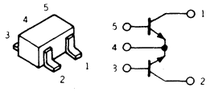


2SB624
2SC2712

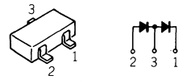
FMS1



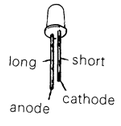
FMW1

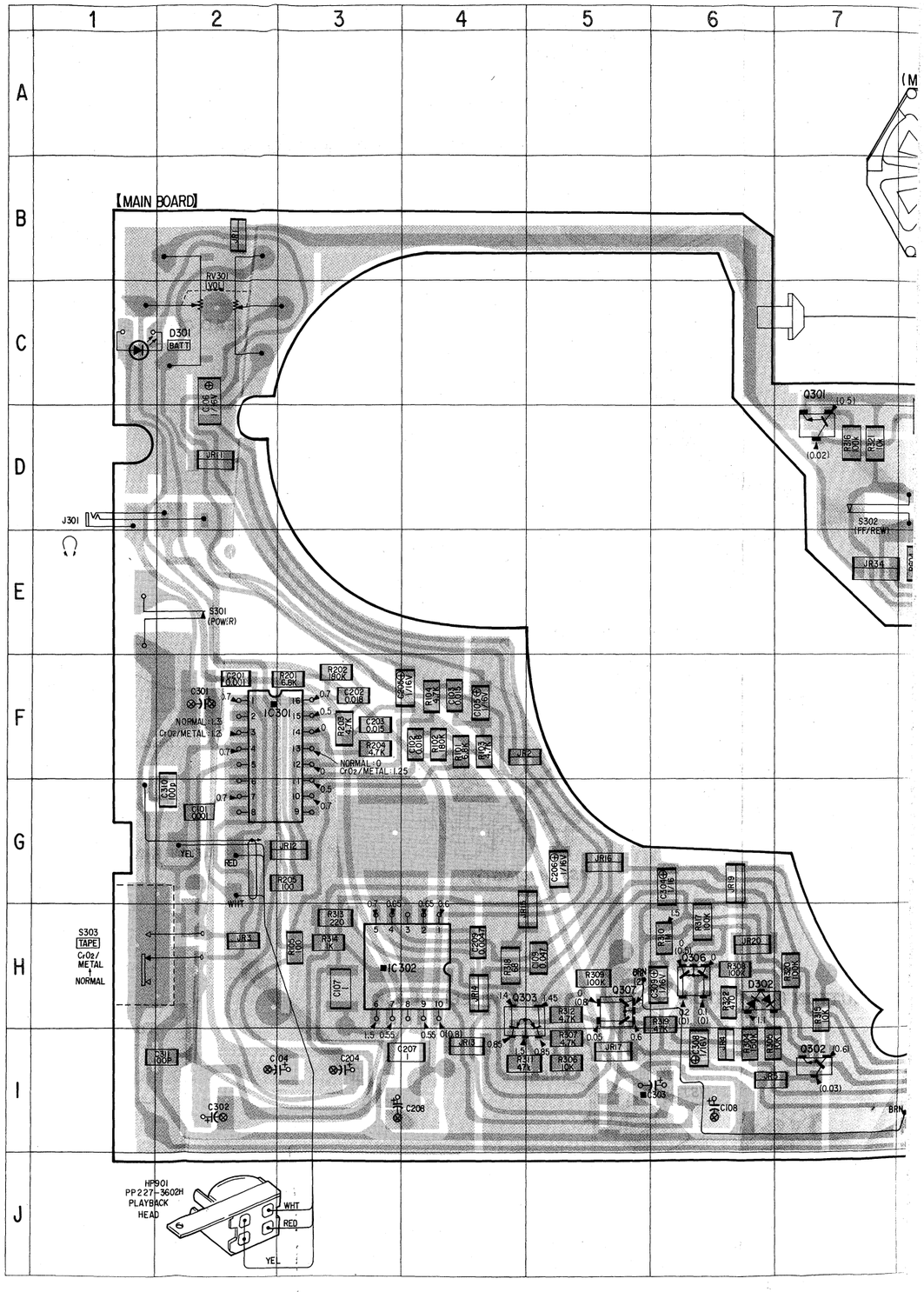


1SS123



SLP135B-55



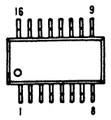


SECTION 3
DIAGRAMS

3-1. MOUNTING DIAGRAM

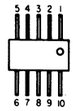
● Semiconductor Lead Layouts

BA3413F



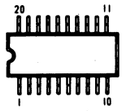
(TOP VIEW)

CX20089A



(Top view)

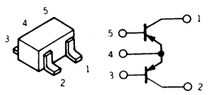
CX20123



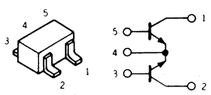
(TOP VIEW)

2SB624
2SC2712

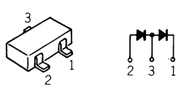
FMS1



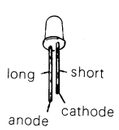
FMW1

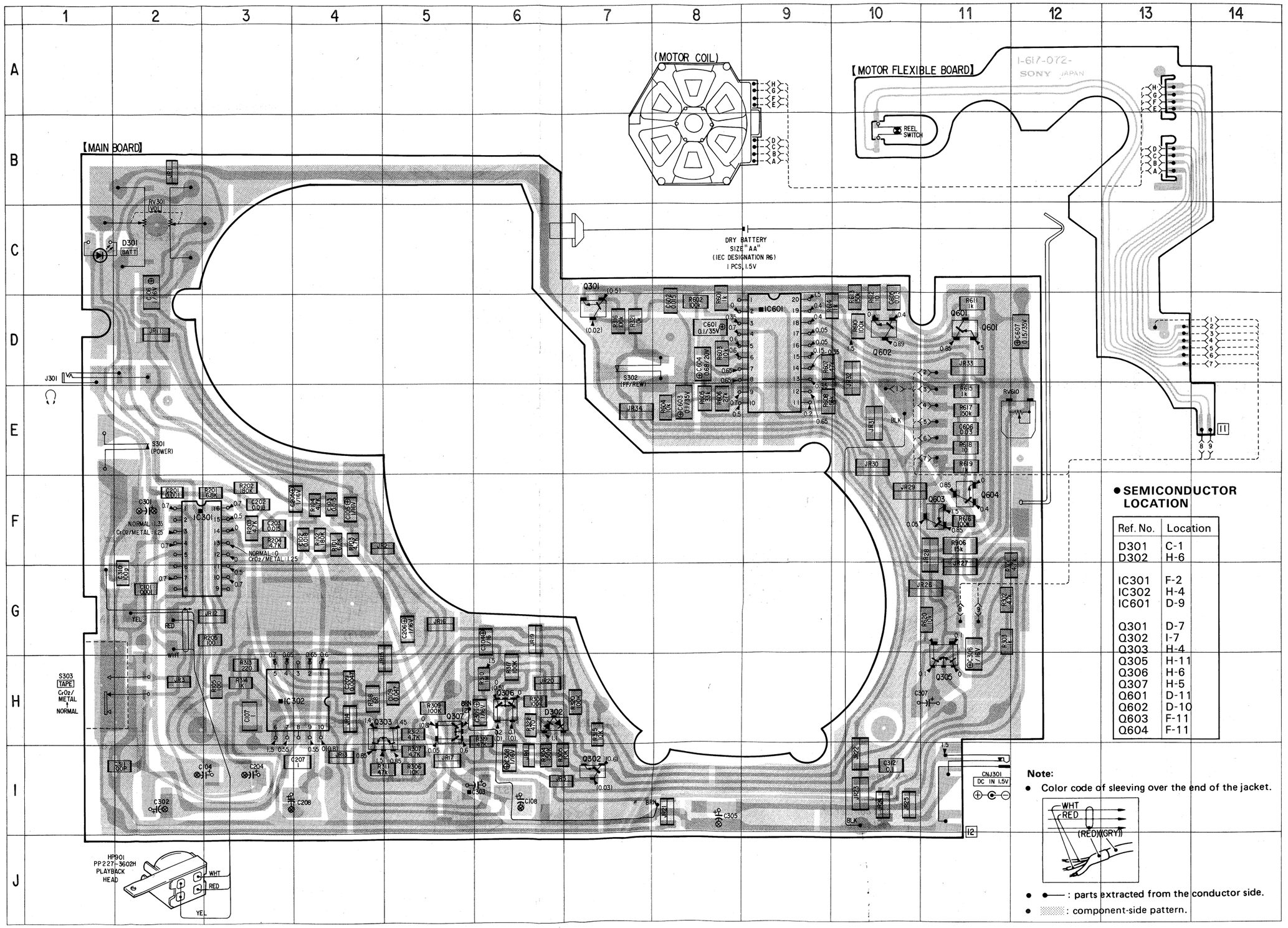


1SS123



SLP135B-55





● **SEMICONDUCTOR LOCATION**

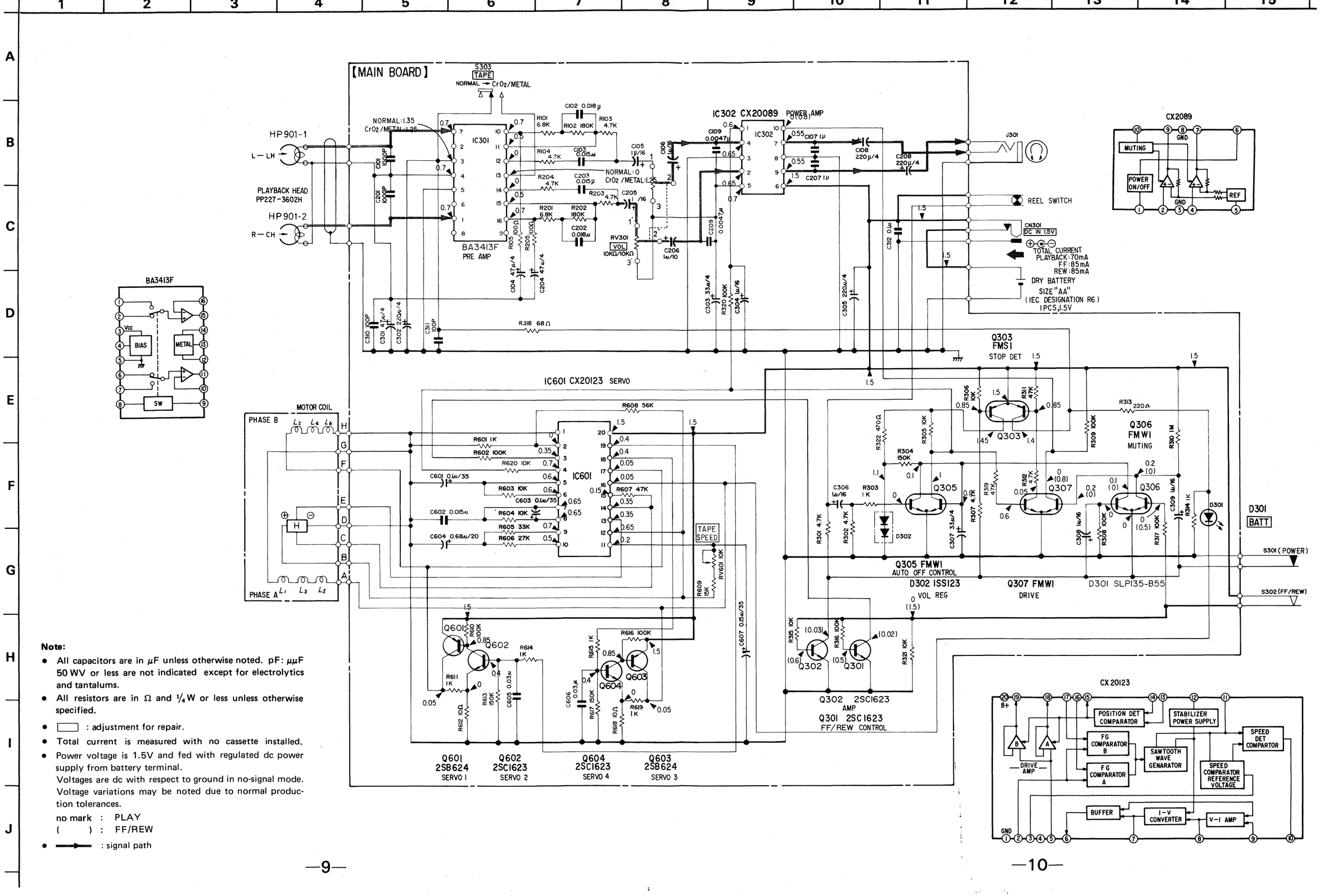
Ref. No.	Location
D301	C-1
D302	H-6
IC301	F-2
IC302	H-4
IC601	D-9
Q301	D-7
Q302	I-7
Q303	H-4
Q305	H-11
Q306	H-6
Q307	H-5
Q601	D-11
Q602	D-10
Q603	F-11
Q604	F-11

Note:

- Color code of sleeving over the end of the jacket.

- ●— : parts extracted from the conductor side.
- ▒▒ : component-side pattern.

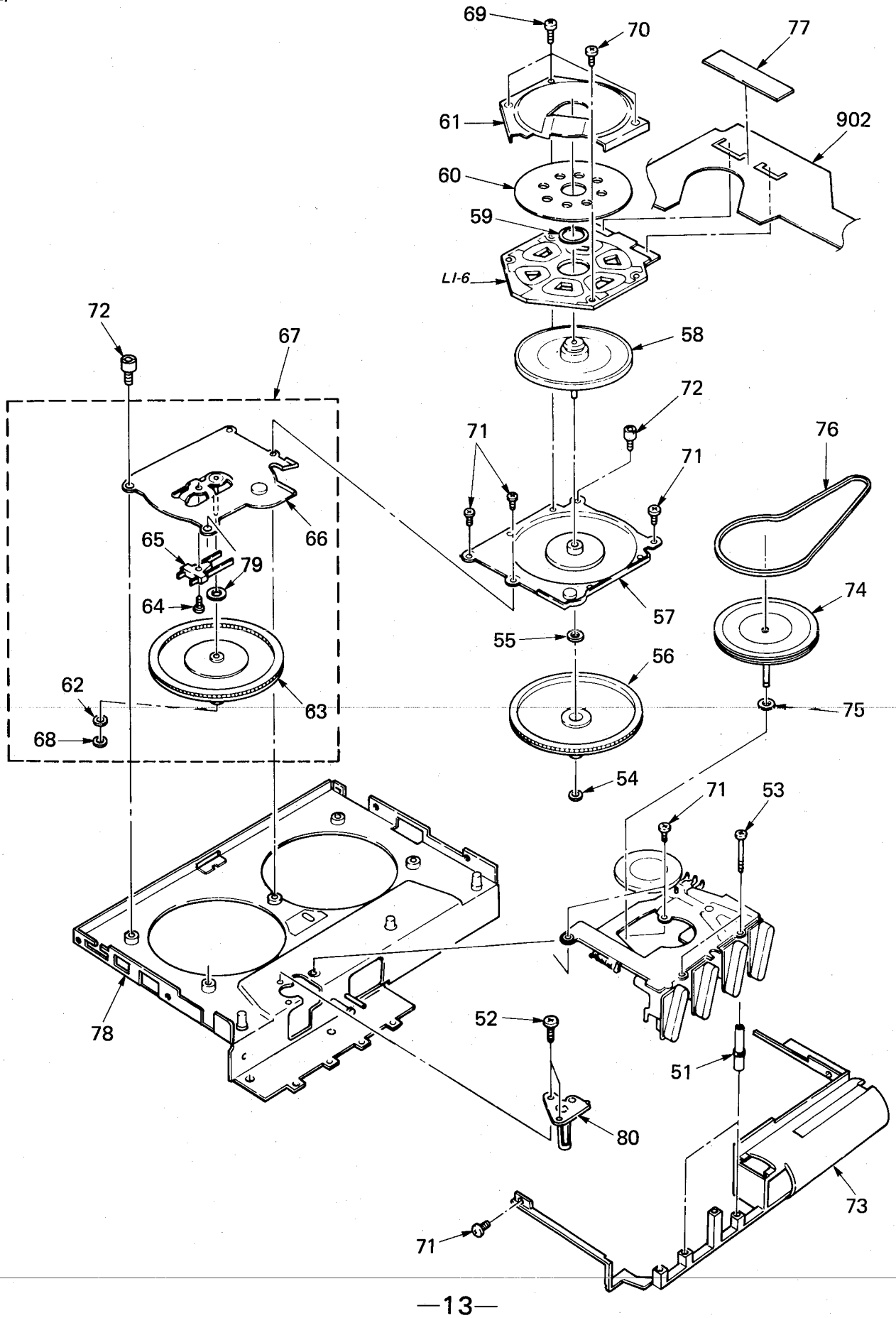
3-2. SCHEMATIC DIAGRAM



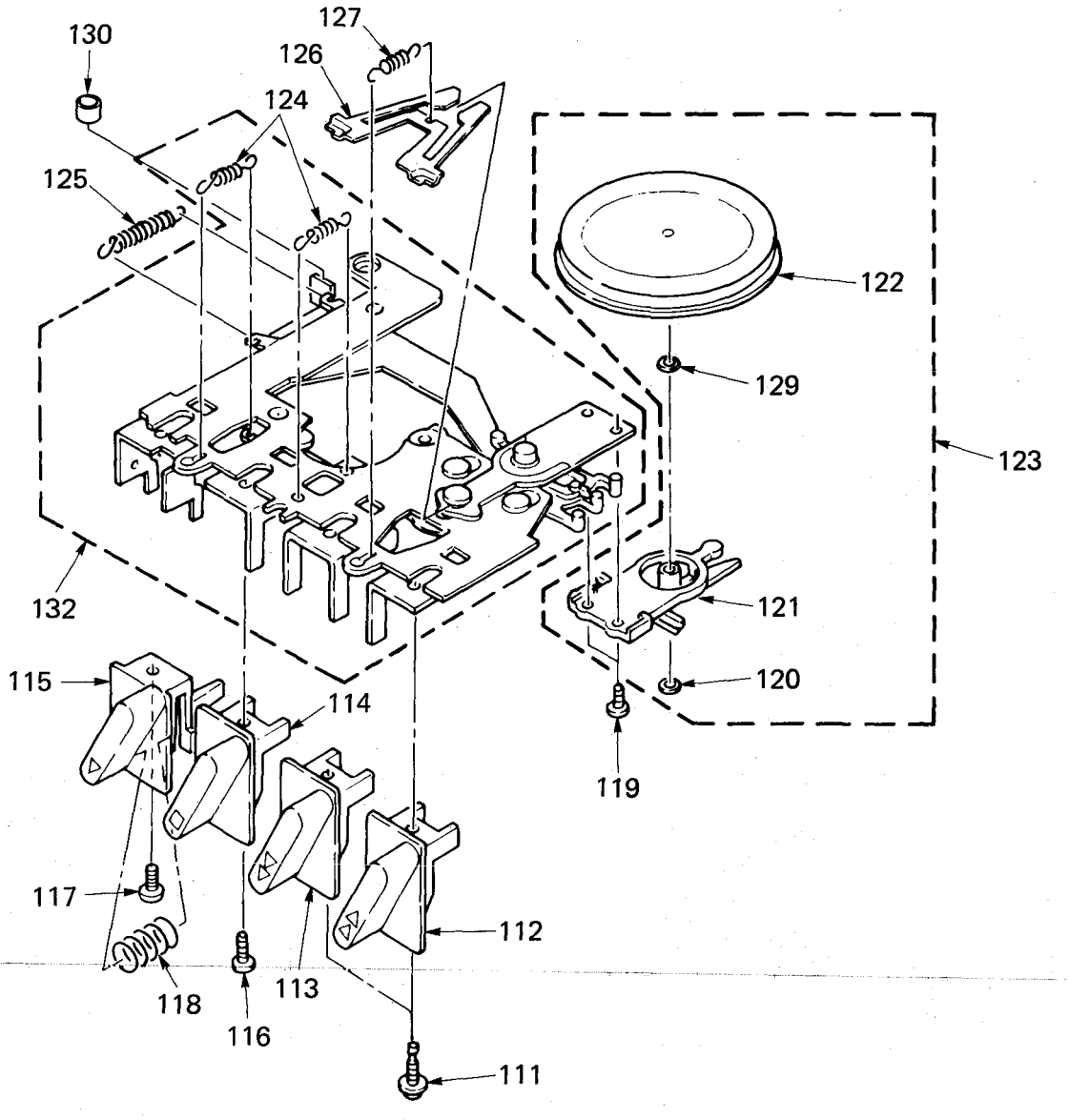
Note:

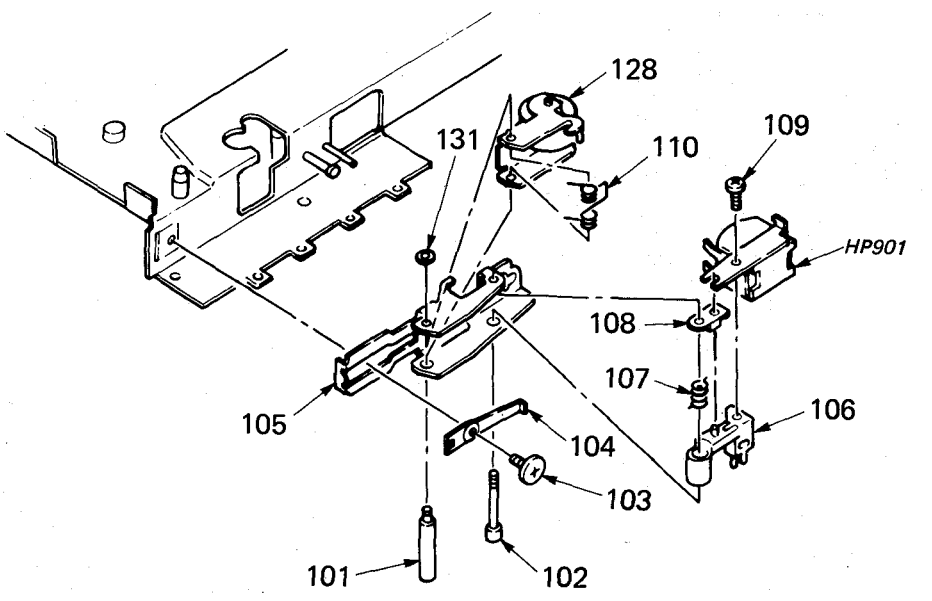
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- ▭ : adjustment for repair.
- Total current is measured with no cassette installed.
- Power voltage is 1.5V and fed with regulated dc power supply from battery terminal.
  Voltages are dc with respect to ground in no-signal mode.
  Voltage variations may be noted due to normal production tolerances.
  no mark : PLAY
  ( ) : FF/REW
- ⟶ : signal path

(2)


69
70
77
61
902
60
59
LI-6
72
67
58
72
71
71
76
65
66
79
64
74
57
55
56
62
63
75
68
54
71
53
78
52
51
80
73
71

(3)


130
127
126
124
125
122
129
123
132
121
120
119
115
114
117
112
118
113
116
111


128
131
110
109
HP901
108
107
106
105
104
103
101
102

MECHANISM SECTION

No.	Part No.	Description
51	3-315-399-00	COLLAR, BUTTON
52	7-627-850-78	PRECISION SCREW +P 1.4X1.8
53	3-315-404-00	SCREW
54	3-315-384-01	WASHER, STOPPER (t=0.13)
	3-315-384-11	WASHER, STOPPER (t=0.25)
	3-315-384-21	WASHER, STOPPER (t=0.2)
	3-315-384-31	WASHER, STOPPER (t=0.3)
	3-315-384-41	WASHER, STOPPER (t=0.35)
55	3-317-702-01	SPACER (D)(t=0.2)
	3-317-702-11	SPACER (D)(t=0.05)
	3-317-702-21	SPACER (D)(t=0.1)
56	3-315-436-00	GEAR (OUTSERT), SUPPLY REEL
57	A-3133-206-A	RIVETING ASSY, MOTOR SLEEVE
58	A-3133-205-A	WHEEL ASSY BLOCK ASSY, MOTOR
59	3-315-332-01	SPACER (t=0.05)
	3-315-332-11	SPACER (t=0.1)
	3-315-332-21	SPACER (t=0.13)
60	3-315-390-00	PLATE, HYSTERESIS
61	*3-315-419-00	PLATE, SHIELD
62	3-317-701-01	WASHER (t=0.45)
	3-317-701-11	WASHER (t=0.25)
63	X-3315-315-0	GEAR ASSY, TAKE-UP REEL
64	7-627-850-48	+P 1.4X1.6
65	3-315-412-00	CONTACT, OUTSERT
66	X-3315-314-0	CHASSIS ASSY, TAKE-UP REEL
67	A-3163-080-A	CHASSIS BLOCK ASSY, T REEL
68	3-315-384-01	WASHER, STOPPER (t=0.13)
	3-315-384-11	WASHER, STOPPER (t=0.25)
69	3-315-485-01	SCRWE (M1.4X2.3), PRECISION
70	3-317-706-01	SCREW (M1.4X2.3)
71	7-627-850-07	SCREW, PRECISION +P 1.4X2
72	3-330-405-01	SHAFT (B), CABINET
73	3-330-406-01	HOLDER, BATT
74	X-3317-508-1	FLYWHEEL ASSY
75	3-315-495-01	WASHER (t=0.25)
	3-315-495-11	WASHER (t=0.13)
	3-315-495-21	WASHER (t=0.2)
	3-315-495-31	WASHER (t=0.3)
76	3-315-405-00	BELT
78	A-3125-015-A	CHASSIS BLOCK ASSY, REEL
79	3-701-438-01	WASHER (t=0.13)
	3-701-438-11	WASHER, 2.5 (t=0.25)
80	X-3317-521-1	SLEEVE ASSY

MECHANISM SECTION

No.	Part No.	Description
101	3-315-393-00	SHAFT, PINCH LEVER
102	3-315-392-00	SCREW, ADJUSTMENT
103	7-627-850-37	SCREW, PRECISION +P 1.4X1.4
104	3-315-406-00	SPRING
105	3-315-431-00	CHASSIS, HEAD
106	3-315-430-00	TABLE, HEAD
107	3-315-391-00	SPRING
108	3-315-463-00	PLATE, GROUND, HEAD
109	3-315-484-02	SCREW (M2X3), HEAD, WASHER
110	3-315-394-00	SPRING
111	3-315-395-00	SCREW, BUTTON
112	3-315-434-11	BUTTON, REW
113	3-315-433-11	BUTTON, FF
114	3-315-435-11	BUTTON, STOP
115	3-315-432-11	BUTTON, PLAY
116	3-305-528-11	SCREW, STOPPER
117	3-305-528-21	SCREW, STOPPER
118	3-315-331-00	SPRING, COMPRESSION
119	7-627-551-47	SCREW, PRECISION +P 1.4X1.4
120	3-315-414-00	WASHER (t=0.25)
	3-315-414-11	WASHER (t=0.19)
	3-315-414-21	WASHER (t=0.13)
121	X-3315-307-0	LEVER (B) ASSY, FR
122	X-3315-308-0	WHEEL ASSY, REVERSE
123	A-3125-002-A	WHEEL BLOCK ASSY, REVERSE
124	3-315-343-00	SPRING, TENSION (POWER TENSION)
125	3-315-341-00	SPRING, TENSION (POWER TENSION)
126	3-315-396-00	LEVER (C), F.R
127	3-315-397-00	SPRING, TENSION (POWER TENSION)
128	X-3330-401-1	PINCH LEVER ASSY
129	3-315-415-00	WASHER (1.5-2.3)(t=0.08)
	3-315-415-11	WASHER (1.5-2.3)(t=0.1)
	3-315-416-00	WASHER (t=0.1)
	3-315-416-21	WASHER (t=0.2)
130	3-573-469-00	RETAINER, LEAD, SD
131	3-315-384-11	WASHER, STOPPER (t=0.25)
132	*X-3330-404-1	PLATE ASSY, CONTROL

SECTION 5
ELECTRICAL PARTS LIST

NOTE:
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF:μF, PF:μμF.

RESISTORS
- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : μH

SEMICONDUCTORS
In each case, U : μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC, UPD...: μPD...

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
901	A-3015-393-A	PC BOARD ASSY, MAIN			
902	1-617-072-11	PC BOARD, MOTOR FLEXIBLE			
C101	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V
C102	1-163-024-00	CERAMIC CHIP	0.018MF	10%	50V
C103	1-163-023-00	CERAMIC CHIP	0.015MF	10%	50V
C104	1-124-432-00	ELECT	47MF	20%	4V
C105	1-135-091-00	TANTAL. CHIP	1MF	10%	16V
C106	1-135-091-00	TANTAL. CHIP	1MF	10%	16V
C107	1-162-611-00	CERAMIC CHIP	1MF		25V
C108	1-124-413-00	ELECT	220MF	20%	4V
C109	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C201	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V
C202	1-163-024-00	CERAMIC CHIP	0.018MF	10%	50V
C203	1-163-023-00	CERAMIC CHIP	0.015MF	10%	50V
C204	1-124-432-00	ELECT	47MF	20%	4V
C205	1-135-091-00	TANTAL. CHIP	1MF	10%	16V
C206	1-135-091-00	TANTAL. CHIP	1MF	10%	16V
C207	1-162-611-00	CERAMIC CHIP	1MF		25V
C208	1-124-413-00	ELECT	220MF	20%	4V
C209	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C301	1-124-432-00	ELECT	47MF	20%	4V
C302	1-124-413-00	ELECT	220MF	20%	4V
C303	1-124-431-00	ELECT	33MF	20%	4V
C304	1-135-091-00	TANTAL. CHIP	1MF	10%	16V
C305	1-124-413-00	ELECT	220MF	20%	4V
C306	1-135-091-00	TANTAL. CHIP	1MF	10%	16V
C307	1-124-431-00	ELECT	33MF	20%	4V
C308	1-135-091-00	TANTAL. CHIP	1MF	10%	16V
C309	1-135-091-00	TANTAL. CHIP	1MF	10%	16V
C310	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C311	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C312	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C601	1-135-070-00	TANTAL. CHIP	0.1MF	10%	35V
C602	1-163-023-00	CERAMIC CHIP	0.015MF	10%	50V
C603	1-135-070-00	TANTAL. CHIP	0.1MF	10%	35V
C604	1-135-087-21	TANTAL. CHIP	0.68MF	10%	20V
C605	1-163-810-00	CERAMIC CHIP	0.03MF	10%	25V
C606	1-163-810-00	CERAMIC CHIP	0.03MF	10%	25V
C607	1-135-071-21	TANTAL. CHIP	0.15MF	10%	35V
CN301	1-507-894-00	JACK, EXTERNAL POWER			
D301	8-719-903-39	DIODE SLP135B-55			
D302	8-719-101-23	DIODE 1SS123			
HP901	8-825-507-11	HEAD, MAGNETIC (REC/PB ERASE)			

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
IC301	8-759-923-58	IC BA3413F-T1			
IC302	8-759-602-12	IC CX20089A			
IC601	8-752-012-32	IC CX20123			
J301	1-563-076-11	JACK, HEADPHONE			
JR1	1-216-295-00	METAL CHIP	0	5%	1/10W
JR2	1-216-295-00	METAL CHIP	0	5%	1/10W
JR3	1-216-295-00	METAL CHIP	0	5%	1/10W
JR4	1-216-295-00	METAL CHIP	0	5%	1/10W
JR5	1-216-295-00	METAL CHIP	0	5%	1/10W
JR11	1-216-296-00	METAL CHIP	0	5%	1/8W
JR12	1-216-296-00	METAL CHIP	0	5%	1/8W
JR13	1-216-296-00	METAL CHIP	0	5%	1/8W
JR14	1-216-296-00	METAL CHIP	0	5%	1/8W
JR15	1-216-296-00	METAL CHIP	0	5%	1/8W
JR16	1-216-296-00	METAL CHIP	0	5%	1/8W
JR17	1-216-296-00	METAL CHIP	0	5%	1/8W
JR19	1-216-296-00	METAL CHIP	0	5%	1/8W
JR20	1-216-296-00	METAL CHIP	0	5%	1/8W
JR21	1-216-296-00	METAL CHIP	0	5%	1/8W
JR22	1-216-296-00	METAL CHIP	0	5%	1/8W
JR23	1-216-296-00	METAL CHIP	0	5%	1/8W
JR24	1-216-296-00	METAL CHIP	0	5%	1/8W
JR25	1-216-296-00	METAL CHIP	0	5%	1/8W
JR26	1-216-296-00	METAL CHIP	0	5%	1/8W
JR27	1-216-296-00	METAL CHIP	0	5%	1/8W
JR28	1-216-296-00	METAL CHIP	0	5%	1/8W
JR29	1-216-296-00	METAL CHIP	0	5%	1/8W
JR30	1-216-296-00	METAL CHIP	0	5%	1/8W
JR31	1-216-296-00	METAL CHIP	0	5%	1/8W
JR32	1-216-296-00	METAL CHIP	0	5%	1/8W
JR33	1-216-296-00	METAL CHIP	0	5%	1/8W
JR34	1-216-296-00	METAL CHIP	0	5%	1/8W
L1-6	1-462-209-00	COIL, MOTOR (STATOR)			
Q301	8-729-271-29	TRANSISTOR 2SC2712			
Q302	8-729-271-29	TRANSISTOR 2SC2712			
Q303	8-729-902-96	TRANSISTOR FMS1			
Q305	8-729-903-10	TRANSISTOR FMW1			
Q306	8-729-903-10	TRANSISTOR FMW1			
Q307	8-729-903-10	TRANSISTOR FMW1			
Q601	8-729-162-44	TRANSISTOR 2SB624BV4			
Q602	8-729-271-29	TRANSISTOR 2SC2712			
Q603	8-729-162-44	TRANSISTOR 2SB624BV4			
Q604	8-729-271-29	TRANSISTOR 2SC2712			

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R101	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R102	1-216-103-00	METAL CHIP	180K	5%	1/10W
R103	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R104	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R105	1-216-025-00	METAL CHIP	100	5%	1/10W
R201	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R202	1-216-103-00	METAL CHIP	180K	5%	1/10W
R203	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R204	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R205	1-216-025-00	METAL CHIP	100	5%	1/10W
R301	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R302	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R303	1-216-049-00	METAL CHIP	1K	5%	1/10W
R304	1-216-101-00	METAL CHIP	150K	5%	1/10W
R305	1-216-073-00	METAL CHIP	10K	5%	1/10W
R306	1-216-073-00	METAL CHIP	10K	5%	1/10W
R307	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R308	1-216-097-00	METAL CHIP	100K	5%	1/10W
R309	1-216-097-00	METAL CHIP	100K	5%	1/10W
R310	1-216-121-00	METAL CHIP	1M	5%	1/10W
R311	1-216-089-00	METAL CHIP	47K	5%	1/10W
R312	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R313	1-216-182-00	METAL CHIP	220	5%	1/8W
R314	1-216-049-00	METAL CHIP	1K	5%	1/10W
R315	1-216-073-00	METAL CHIP	10K	5%	1/10W
R316	1-216-097-00	METAL CHIP	100K	5%	1/10W
R317	1-216-246-00	METAL CHIP	100K	5%	1/8W
R318	1-216-170-00	METAL CHIP	68	5%	1/8W
R319	1-216-089-00	METAL CHIP	47K	5%	1/10W
R320	1-216-097-00	METAL CHIP	100K	5%	1/10W
R321	1-216-073-00	METAL CHIP	10K	5%	1/10W
R322	1-216-041-00	METAL CHIP	470	5%	1/10W
R601	1-216-049-00	METAL CHIP	1K	5%	1/10W
R602	1-216-097-00	METAL CHIP	100K	5%	1/10W
R603	1-216-073-00	METAL CHIP	10K	5%	1/10W
R604	1-216-073-00	METAL CHIP	10K	5%	1/10W
R605	1-216-085-00	METAL CHIP	33K	5%	1/10W
R606	1-216-083-00	METAL CHIP	27K	5%	1/10W
R607	1-216-089-00	METAL CHIP	47K	5%	1/10W
R608	1-216-091-00	METAL CHIP	56K	5%	1/10W
R609	1-216-226-00	METAL CHIP	15K	5%	1/8W
R610	1-216-097-00	METAL CHIP	100K	5%	1/10W
R611	1-216-049-00	METAL CHIP	1K	5%	1/10W
R612	1-216-001-00	METAL CHIP	10	5%	1/10W
R613	1-216-101-00	METAL CHIP	150K	5%	1/10W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R614	1-216-049-00	METAL CHIP	1K	5%	1/10W
R615	1-216-049-00	METAL CHIP	1K	5%	1/10W
R616	1-216-097-00	METAL CHIP	100K	5%	1/10W
R617	1-216-101-00	METAL CHIP	150K	5%	1/10W
R618	1-216-001-00	METAL CHIP	10	5%	1/10W
R619	1-216-049-00	METAL CHIP	1K	5%	1/10W
R620	1-216-073-00	METAL CHIP	10K	5%	1/10W
RV301	1-230-180-00	RES, VAR, CARBON 10K/10K			
RV601	1-230-478-11	RES, ADJ, METAL GLAZE 10K			
S301	1-570-395-11	SWITCH, LEAF (POWER)			
S302	1-570-395-11	SWITCH, LEAF (FF/REW)			
S303	1-554-585-00	SWITCH, SLIDE (M-N)(TAPE)			

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-528-052-00	BATTERY, ALKALINE MANGANIN (LR6)
3-330-435-01	CUSHION (B)
3-330-436-01	CUSHION (A)
3-330-441-01	BELT, CARRYING
3-330-446-01	(US).....INDIVIDUAL CARTON
3-330-450-01	(AEP,UK).....INDIVIDUAL CARTON
3-330-451-01	(E).....INDIVIDUAL CARTON
3-330-452-01	(Canadian)...INDIVIDUAL CARTON
3-701-622-00	(US,Canadian,E)...BAG, POLYETHYLENE
3-704-080-01	(AEP,E).....LABEL (RED), DISCRIMINATION
3-704-081-01	(US,E,UK).....LABEL (PINK), DISCRIMINATION
3-704-082-01	(E,US,AEP,UK)..LABEL (WHITE), DISCRIMINATION
3-704-083-01	(AEP,E).....LABEL (GRAY), DISCRIMINATION
3-704-085-01	(AEP,US,E,UK)...LABEL (BLUE), DISCRIMINATION
3-704-114-01	(US,UK).....LABEL (VIOLET), DISCRIMINATION
3-704-119-01	(US).....LABEL (YELLOW), DISCRIMINATION
3-760-796-11	(AEP,E,UK).....MANUAL, INSTRUCTION
3-760-796-21	(US,Canadian)...MANUAL, INSTRUCTION
3-795-748-21	(US)...SAFETY INSTRUCTRIONS, HEADPHONE
X-3329-657-1	(E)....ATTACHMENT ASSY

STEREO HEADPHONE MDR-A10L (US, Canadian, AEP, UK)

8-952-266-90	WHITE
8-952-266-91	RED
8-952-266-92	LIGHT BLUE
8-952-266-94	BLACK
8-952-266-95	LIGHT YELLOW
8-952-266-96	LIGHT PINK
8-952-266-97	LIGHT VIOLET
8-952-266-98	BLUE
8-952-266-XX	PINK

STEREO HEADPHONE MDR-E212 (E Model)

8-952-236-90	BLACK
8-952-236-91	WHITE
8-952-236-92	RED
8-952-236-93	BLUE
8-952-236-94	PINK

Sony Corporation
Audio Group

9-951-989-12

English
87C0499-1
Printed in Japan
© 1987. 3